



Office de la Propriété
Intellectuelle
du Canada

Un organisme
d'Industrie Canada

Canadian
Intellectual Property
Office

An agency of
Industry Canada

CA 2302801 A1 2001/09/23

(21) **2 302 801**

(12) **DEMANDE DE BREVET CANADIEN
CANADIAN PATENT APPLICATION**

(13) **A1**

(22) Date de dépôt/Filing Date: 2000/03/23

(41) Mise à la disp. pub./Open to Public Insp.: 2001/09/23

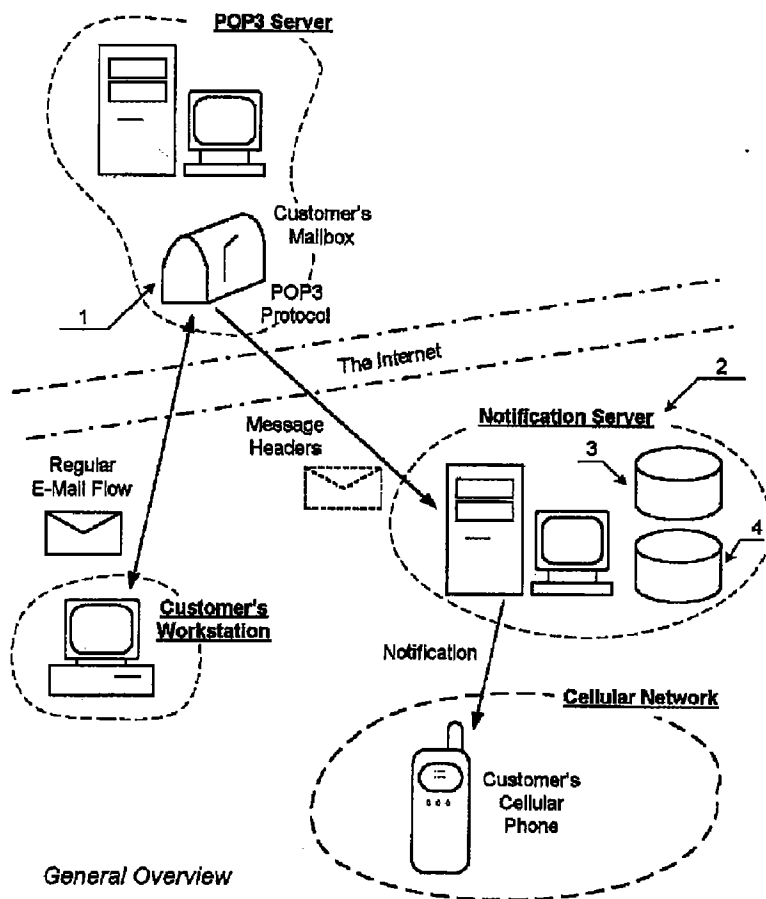
(51) Cl.Int.⁷/Int.Cl.⁷ H04L 12/54, H04Q 7/20

(71) Demandeur/Applicant:
UNIPOINT CORPORATION, CA

(72) Inventeur/Inventor:
ISSINSKI, ANTON I., CA

(54) Titre : SYSTEME ET METHODE DE NOTIFICATION DE RECEPTION DE COURRIER ELECTRONIQUE

(54) Title: SYSTEM AND METHOD FOR PROVIDING ELECTRONIC MAIL MESSAGE NOTIFICATION INFORMATION



(57) **Abrégé/Abstract:**

An electronic mail notification system provides information that its subscriber has a new electronic mail in his remote mailbox. The system periodically scans subscriber's mailbox and generates notification events if there are new messages. The subscriber is then notified of the received e-mail message by the wireless system such as a cellular telephone or a pager.

System and Method for Providing Electronic Mail Message Notification Information

ABSTRACT

An electronic mail notification system provides information that its subscriber has a new electronic mail in his remote mailbox. The system periodically scans subscriber's mailbox and generates notification events if there are new messages. The subscriber is then notified of the received e-mail message by the wireless system such as a cellular telephone or a pager.

DESCRIPTION

BACKGROUND

This invention relates to a process of producing notifications to wireless device users about arriving new e-mail messages to their Internet mailbox accounts.

The well-known "e-mail" feature in the Internet is usually based on the service of electronic mailboxes provided by various organizations and accessible around the globe by means of the standard protocol called Post Office Protocol - Version 3 (POP3), described in Request for Comments 1725 (RFC 1725), Network Working Group, November 1994. From time to time, users connect to their mailbox providers, log on to their mailboxes and download new messages from it. Until user logs on to the mailbox, there is no any indication on his local site about new mail presence.

DESCRIPTION OF PRIOR ART

At the present time, there are two common ways how Cellular Service Provider (CSP) companies obtain new e-mail notification information to their subscribers:

1. Request the subscriber to change his/her Internet e-mail address to CSP's POP3 server address. When a new message arrives to their server, CSP generates a new e-mail notification at that server, sends this notification to the subscriber's cellular phone and then forwards the original message to the subscriber's server or let the subscriber to pick up messages from the CSP server.

The disadvantage of this approach is that each subscriber has to request all his correspondents to change his address to the CSP's one.

For example, this method is implemented at Cantel AT&T Wireless and FIDO CSPs cellular companies.

2. Request the subscriber to forward inbound e-mail messages from his local workstation to CSP SMTP server. The CSP generates a notification message at his SMTP server and sends it to the client's cellular phone or pager.

The disadvantage of this method is that each subscriber requires to have a running computer and a permanent IP connection.

For example, this method is used at Bell Mobility. cellular company

From

to 1-819-953-2476

at 3/24/00 2:36 PM Pg 004/008

Some interesting ideas how to produce notification about new e-mail arriving using wireless devices like cellular phones are also described in Canadian Patents number 2254803, 2223337, 2251589.

SUMMARY

These disadvantages may be overcome by introducing a special type of central mailbox scanning server at the CSP site (Fig.1).

To provide the notification service, the CSP runs a special server program that will periodically log on to the subscriber's POP3 mailbox over the Internet using account information and password provided by the subscriber, download available messages, generate notifications for the new ones and then leave the subscriber's mailbox without removing any messages from it (Fig.2).

Because subscriber's mailbox remains intact, this method of obtaining notification information and forwarding it to the wireless device will have minimal overhead to the customer. To receive notifications the subscriber will not be required to have a running computer or special software and his e-mail addresses will remain the same.

DETAILED DESCRIPTION

To obtain message notification information, CSP introduces a Notification Server (NS) (Fig. 1 pos. 2) that has an access to the Internet.

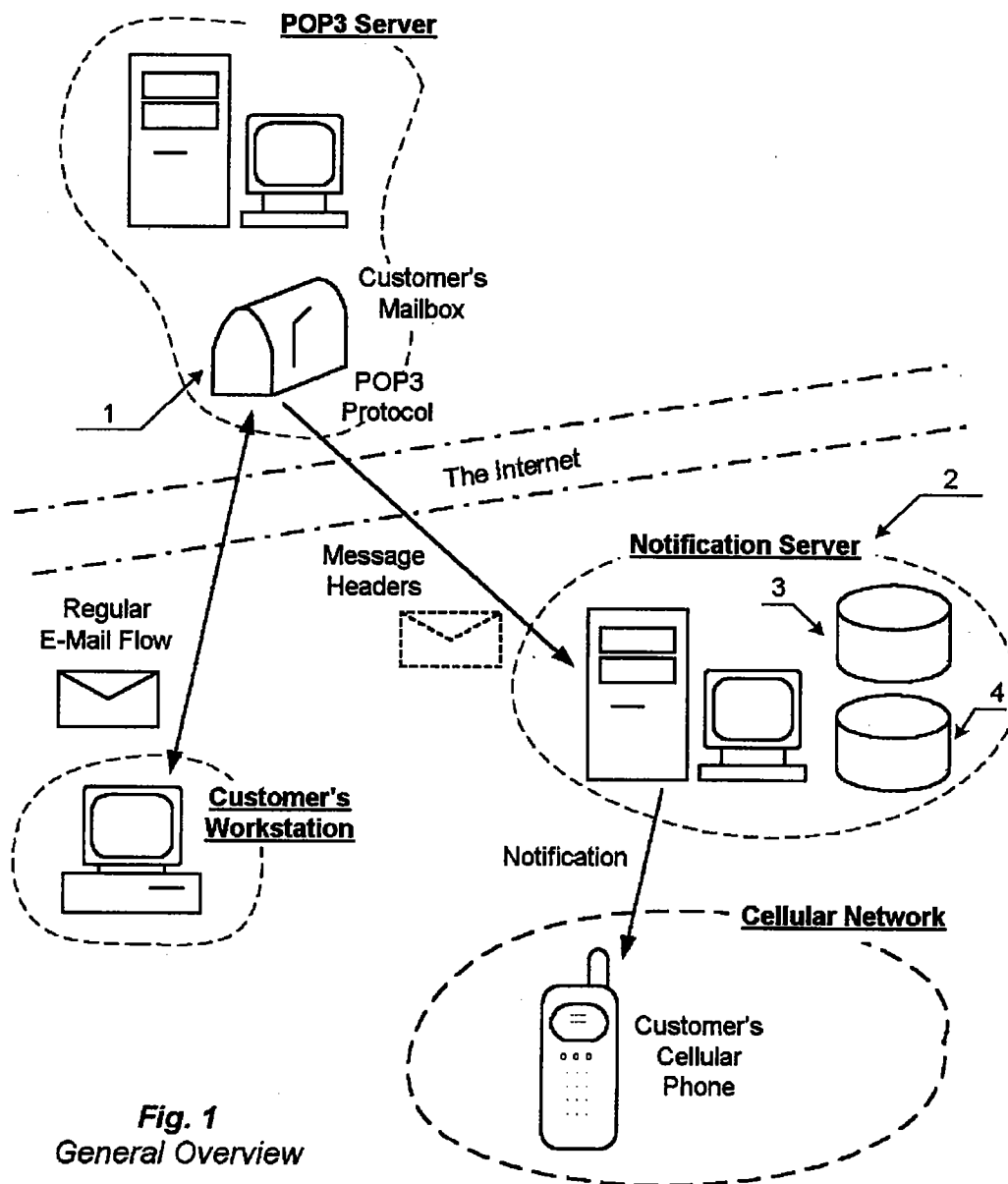
The NS works as a POP3 scanning client against subscribers' POP3 mailbox accounts (Fig. 1 pos. 1). NS has its own database (Fig. 1 pos. 3) comprising the subscribers' account information comprising POP3 server address, user name and password. NS logs on to the subscribers' mailboxes on a periodical basis, downloads available messages from said accounts and then logs off without removing messages from the mailboxes (Fig. 2). Hence, the subscriber's regular e-mail flow will not be affected by the notification service.

Notification Server stores (Fig. 2 pos. 5) message identification information in its local database (Fig.1 pos. 4) for forwarded notifications, so next time it logs on to that mailbox it will not send the duplicated notification to the subscriber if the notified message is still there (Fig. 2 pos. 6).

The Notification Server removes message identifications from its local database for messages that are not present in the mailbox (Fig. 2 pos. 7). That are messages have been downloaded by the subscriber during his regular mail checkup.

WHICH IS CLAIMED IS:

1. A method for obtaining message notification information for a subscriber having a wireless device comprising the steps of:
 - (a) connecting to the remote mail server where said subscriber has a mailbox account
 - (b) logging into the said subscriber's mailbox account
 - (c) receiving message information from said mailbox account
 - (d) forwarding said message information notification to said wireless device of the subscriber.
2. The method of claim 1, further comprising the step of:
 - (a) storing said message identification within notification system after the notification has been forwarded to the subscriber.
3. The method of claim 2, further comprising the step of:
 - (a) not forwarding a notification to the subscriber if said message identification is stored within notification system.
4. The method of claim 2, further comprising the step of:
 - (a) removing message identification from notification system if said message information is not present in the mailbox.
5. The method of claim 1, further comprising the step of:
 - (a) not removing downloaded messages from said mailbox.
6. The method of claim 1, wherein said wireless device further comprises a cellular telephone.
7. The method of claim 1, wherein said wireless device further comprises a wireless pager.
8. The method of claim 1, wherein the message information further comprises:
 - (a) the message itself.
9. The method of claim 1, wherein the message information further comprises:
 - (a) a part of said message.
10. The method of claim 1, wherein the message information further comprises:
 - (a) the message presence indication.
11. The method of claim 1, wherein said remote mail server is a POP3 server.
12. The method of claim 1, wherein said remote mail server is a IMAP server.
13. Combinations of methods of claims 1-12.



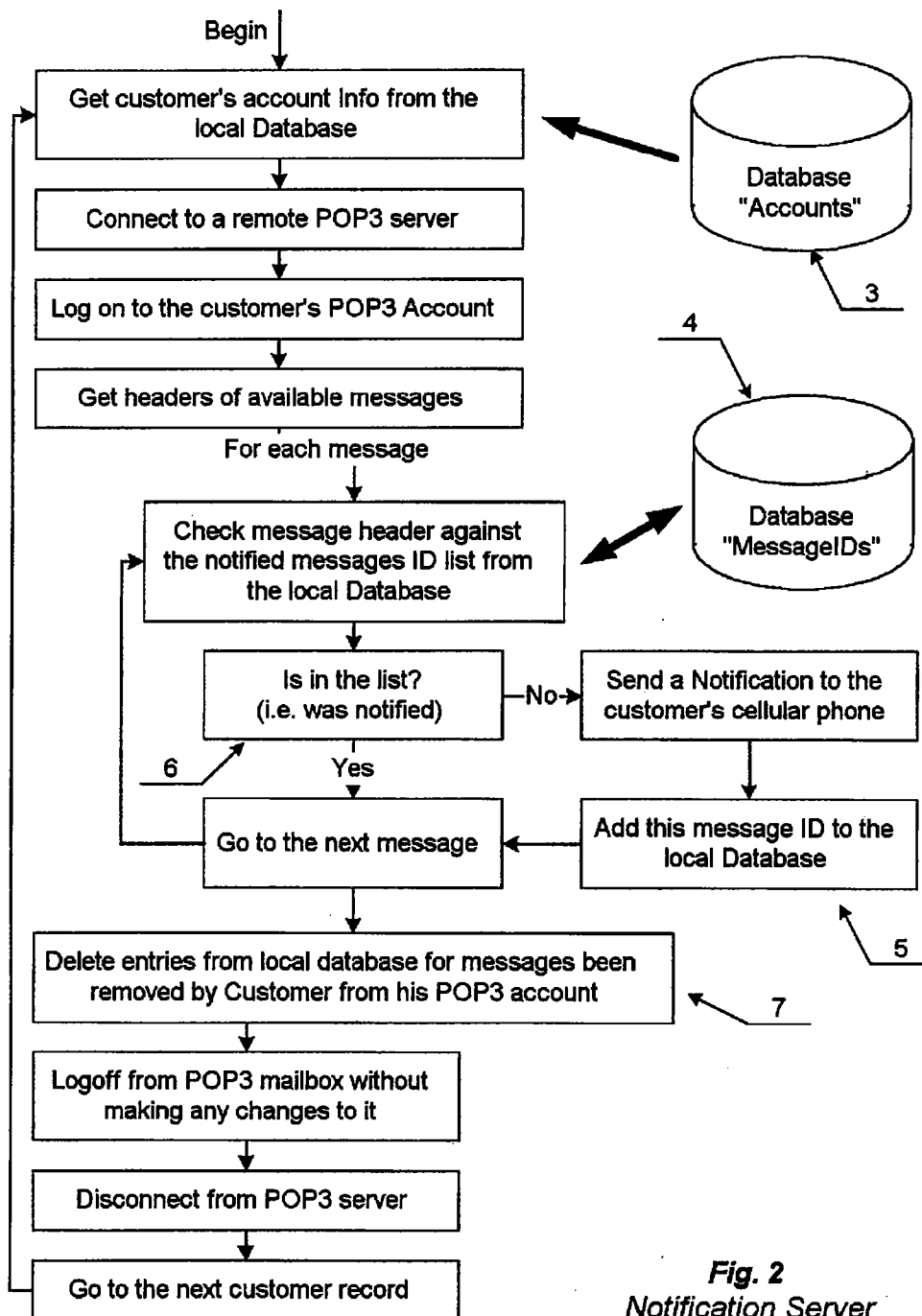


Fig. 2
Notification Server

